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No. 6110

May 13, 1881 - June 12, 1889

THE
THIRTEENTH ANNUAL REPORT
OF THE
BOARD OF DIRECTORS
OF THE
ZOOLOGICAL SOCIETY
OF PHILADELPHIA.

(Incorporated March 21st, 1859.)

READ AT THE ANNUAL MEETING OF THE MEMBERS AND LOAN-
HOLDERS OF THE SOCIETY.

APRIL 23D, 1885.

PHILADELPHIA:
ALLEN, LANE & SCOTT'S PRINTING HOUSE,
Nos. 229-231 South Fifth Street.
1885.

THE
ZOOLOGICAL SOCIETY OF PHILADELPHIA.

OFFICE, FAIRMOUNT PARK.

OFFICERS FOR THE YEAR ENDING APRIL 22d, 1886.

PRESIDENT,
FREDERIC GRAFF.

VICE-PRESIDENT:
GEORGE W. CHILDS, | HENRY LEWIS.

SECRETARY,
THOMAS HOCKLEY.

TREASURER,
WILLIAM HACKER.

DIRECTORS:

J. VAUGHAN MERRICK,	CHARLES W. TROTTER,
JOHN WAGNER,	PROF. JOSEPH LEIDY,
WILLIAM H. MERRICK,	FRANCIS T. FASSITT,
S. FISHER CORLIES,	PROF. H. C. CHAPMAN,
HENRY C. GIBSON,	CLARENCE H. CLARK,
ISAAC J. WISTAR,	JOSEPH E. TEMPLE.

ACTUARY,
CHARLES L. JEFFERSON.

SUPERINTENDENT OF THE GARDEN,
ARTHUR E. BROWN.

SOLICITORS:
SAMUEL WAGNER, | WM. W. MONTGOMERY.

REPORT

OF THE

BOARD OF DIRECTORS.

PHILADELPHIA, April 23d, 1885.

THE Board of Directors of the Zoological Society of Philadelphia, submit to the members and loan-certificate holders this, their Thirteenth Annual Report of the business and operations of the Society from 1st of March, 1884, to 1st of March, 1885.

MEMBERS.

The number of members on the 1st of March, 1885, was—

Annual members,	560
Life members,	175
Corresponding members,	8
Honorary members,	14

Total members (exclusive of loan-holders), . . 757

Decrease, by death or resignation, from preceding year, of twelve annual and six life members.

The total number of loan-holders is 476.

As will be seen from the financial statement, the Society has suffered severely from the general depression of business which has prevailed during the year. By careful economy in all branches, serious inconvenience from the diminution in income has been avoided, and it is earnestly hoped that the patronage of the Garden may be increased during the coming season. The condition of the collection and the attractiveness of the Garden generally has been more than maintained, and at no period of its history has it so highly merited the attention and support of visitors as at the present time.

In this connection it is desired to urge upon the members and loan-holders the importance of using their individual efforts towards increasing the membership of the Society. The income from this source commonly forms an important part of the revenues of institutions such as ours, which are wholly dependent for support upon the good-will of the people, and it would surely appear that among the population of the second largest city in the country, a much larger number than the present membership should be ready to assist in the work of maintaining a zoological garden. To aid in building up this list, the Board have determined to abolish the initiation fee of \$5, and retain only the yearly contribution, amounting to a similar sum.

The Board also desires to make public announcement of the fact that bequests or donations to the Society are not—as has been supposed by some—regarded as a part of the income to be devoted to the operation of the Garden, but are invested as a sinking fund, under the following resolution:—

“Resolved, That the principal of all legacies, bequests, and devises, unless otherwise directed by the testator or donor, shall not be expended, but that the same shall be invested and held as a permanent and stable fund, of which the income only shall be used.”

The following is a report, in detail, of the gate receipts for the year:—

Adults (paying twenty-five cents at gates),	118,181
Children (paying ten cents at gates),	31,655
Members (including Life and Annual Members, loan-holders' annual, and complimentary annual tickets),	2,818
Loan-holders' single tickets,	28,044
Free admissions (charitable institutions, donors' tickets, &c.),	3,183
Package tickets,	230
Excursion tickets,	12,643
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	196,754

*Monthly Record of Visitors for 1884-85, with corresponding
account for 1883-84.*

MONTH.	1883-84.	1884-85.	COMPARISON.
March,	9,513	5,474	Decrease, . 4,039
April,	11,804	11,381	" . 423
May,	29,362	20,514	" . 8,848
June,	24,751	23,803	" . 948
July,	33,165	30,088	" . 3,077
August,	39,324	35,783	" . 3,541
September, . .	36,140	32,731	" . 3,409
October, . . .	15,788	18,716	Increase, . 2,928
November, . .	11,693	9,111	Decrease, . 2,582
December, . . .	5,973	4,054	" . 1,919
January, . . .	2,377	3,102	Increase, . 725
February, . . .	5,425	1,997	Decrease, . 3,428
	225,315	196,754	Decrease, . 28,561

Average daily admissions, 539
 The greatest number of visitors on any one day was
 on Friday, July 4th, 5,235

*Monthly Record of Receipts from Admissions for 1884-85, with
corresponding account for 1883-84.*

MONTH.	1883-84.	1884-85.	COMPARISON.
March, . . .	\$1,739 48	\$1,040 23	Decrease, . \$699 25
April, . . .	2,060 31	2,003 47	" . 56 84
May, . . .	4,875 28	3,512 88	" . 1,362 40
June, . . .	4,241 67	3,989 50	" . 252 17
July, . . .	5,625 32	5,138 97	" . 486 35
August, . .	7,447 47	6,134 44	" . 1,313 03
September, .	7,283 89	6,180 36	" . 1,103 53
October, . .	3,280 44	3,485 00	Increase, . 204 56
November, .	2,240 73	1,661 44	Decrease, . 579 29
December, .	1,112 87	761 99	" . 350 88
January, . .	468 06	572 67	Increase, . 104 61
February, .	1,077 29	380 39	Decrease, . 696 90
	\$41,452 81	\$34,861 34	Decrease, . \$6,591 47

Average daily receipts from admissions, \$95.51
 The largest amount of receipts at the gates on any
 one day was on Friday, July 4th, \$955.38

Total Receipts on the several days of the week, and their respective averages, for 1884-85.

RANK.	DAYS.	TOTAL RECEIPTS.	AVERAGE.
1	Sunday,	\$14,592 85	\$280 63
2	Saturday,	4,455 64	84 07
3	Friday,	4,201 65	80 80
4	Thursday,	3,237 27	62 26
5	Wednesday,	2,936 57	56 47
6	Monday,	2,881 30	55 41
7	Tuesday,	2,556 06	49 15
		\$34,861 34	

The financial condition of the Society is fully shown in the Treasurer's statement, Appendix A, and the report of the General Superintendent, Appendix B, shows the present condition of the menagerie and the details attending the operation of the Garden during the year.

The Board desires to express its thanks for the many donations of animals which have been received.

By order of the Board,

HENRY C. CHAPMAN,

Secretary.

INCOME AND EXPENDITURES.

For the fiscal year ending March 1st, 1885.

INCOME.

Members' initiation fees and dues,	\$550 00	
Admission receipts,	34,861 34	
Rents at Garden,	1,600 00	
Sundry receipts,	674 42	
Sale of Guides,	215 55	
	<u> </u>	<u>\$37,901 31</u>

EXPENDITURES.

(Exclusive of Permanent Improvements, &c.)

Salaries and wages,	\$18,909 22	
Office expenses,	176 82	
General expenses,	17,070 09	
	<u> </u>	<u>\$36,156 13</u>
Estimated loss and depreciation on animals,	2,348 96	
	<u> </u>	<u>\$38,505 09</u>
Balance to debit of profit and loss for year,	603 78	
	<u> </u>	<u>\$37,901 31</u>

CAPITAL.

Receipts and expenditures for the year ending March 1st, 1885.

RECEIPTS.

Sales of animals,	\$129 25	
Add the following amount charged to profit and loss for estimated loss and depreciation on ani- mals,	2,348 96	
	<u> </u>	<u>\$2,478 21</u>

EXPENDITURES.

Permanent improvements and animals as per items in Treasurer's statement (Appendix A),	\$5,464 08	
Balance (being excess of investments over receipts of capital and provided from Profit and Loss),	2,985 87	
	<u> </u>	<u>\$2,478 21</u>

APPENDIX A.

TREASURER'S STATEMENT.

From March 1st, 1884, to March 1st, 1885.

DR.

To Balance, March 1st, 1884,	\$4,238 07
" Sales of animals,	129 25
" Members' fees and dues,	\$550 00
" Admission receipts,	34,861 34
" Rents at Garden,	1,600 00
" Sale of Guide books,	215 55
" Sundry receipts,	674 42
Transferred to credit of profit and loss,	37,901 31
	<u>\$42,268 63</u>

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By warrants paid for—	
Salaries and wages,	\$18,909 22
Office expenses,	176 82
Subsistence,	8,299 66
Advertising,	1,967 93
Insurance,	269 20
Fuel and lights,	1,370 50
Printing,	298 50
Freight and expressage,	181 45
Repairs,	1,334 90
Extra labor and jobbing,	1,023 65
Hardware and tools,	307 17
Lumber,	190 90
Water rent,	1,000 00
Uniforms and equipments,	295 25
Interest and discount,	17 25
Sundry expenses,	513 73
Transferred to debit of profit and loss,	\$36,156 13
Purchase of animals,	\$5,244 21
Horticulture,	219 87
Total permanent improvement and animals,	5,464 08
Balance on hand, March 1st, 1885,	648 42
	<u>\$42,268 63</u>

WILLIAM HACKER, *Treasurer.*

Examined and found correct.

COMMITTEE ON AUDIT,
F. T. FASSITT, *Chairman.*

Cash,	\$648	42
Water supply and drains,	11,583	37
Animal account,	49,492	00
A viaries,	9,744	19
Bear pits,	6,966	82
Monkey house,	7,926	80
Cages,	4,712	38
Fencing,	5,323	75
Vulcanite walks,	36,739	01
Deer parks and enclosures,	5,322	31
Prairie-dog village,	890	64
Gate houses,	11,705	21
Buffalo house,	1,494	15
Horticulture,	7,302	75
Walks, roads, and grading,	71,938	37
Houses for sundry animals,	6,869	16
Lake,	10,447	50
Carnivora house,	55,638	48
Green houses,	4,622	47
Barn,	3,557	12
Elephant house,	40,672	08
Seal ponds,	4,999	73
Carriage sheds,	3,874	86
Restaurant,	14,341	96
Settees and chairs,	2,124	00
Photograph stand,	699	20
New aviary,	12,525	75
Deer house,	20,624	71
Reptile house,	1,659	00
Camel house,	886	82
Music stand,	1,583	65
Permanent enclosure,	9,150	84
Yard and storage room,	2,203	04
	\$428,270	54

APPENDIX B.

To the Board of Directors of the Zoological Society,

GENTLEMEN:—I have the honor to submit to you my report for the year ending on the twenty-eighth day of February, 1885.

The number and valuation of the animals comprised in the collection at the present time is as follows:—

284 Mammals,	\$43,309
411 Birds,	5,827
64 Reptiles and Batrachians,	356
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759	\$49,492
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Being a considerable excess in valuation over that shown by the yearly statements of the last seven years.

The arrivals of animals for the year were 455 in number, and were as follows in character:—

MAMMALS:—

Presented,	59
Purchased,	73
Born,	22
	— 154

BIRDS:—

Presented,	60
Purchased,	147
Born,	6
	— 213

REPTILES AND BATRACHIANS:—

Presented,	56
Purchased,	12
Born,	20
	— 88
	<hr/>
	455
	<hr/>

Of these, a considerable number possess interest sufficient to require special mention.

1. A pair of Moor macaques (*Macacus maurus*) from Borneo. Although these monkeys have been represented once previously in the collection, they are of great rarity, and in this case are of particular interest from the birth of a young one in December, from the pair received in March.

2. A fine adult ibex (*Capra ibex*) from the Grison, in Switzerland, was purchased in April.

3. Two Petz's conures (*Conurus petzi*) from Mexico, new to the collection.

4. A pair of Anubis baboons (*Cynocephalus anubis*) from West Africa, were purchased also in April. The male of this pair is of enormous size and has attracted much attention.

5. A want, long felt in the collection, was supplied on the 29th of April, by the arrival of a hippopotamus. The specimen is a male, was about fifteen months old when purchased, and was captured in the upper Nile, near the region of the Soudan, shortly after birth. On reaching the Garden, he was not inappropriately named "El Mahdi." He was placed at once in the enclosure in the Elephant House, which had been prepared for the one purchased by the Society in 1880, but which died before reaching the Garden, and soon adapted himself both to his new quarters and to his attendant. No trouble of any description has been experienced in the care of the animal, and from the day of his arrival, his condition has been all that could be desired. His growth has been so astonishingly rapid, that before the end of another year it will probably be necessary to enlarge his tank.

6. A considerable collection of European water fowl, embracing the red-headed pochard (*Fuligula ferina*), tufted duck (*Fuligula cristata*), garganey teal (*Querquedula circia*), common teal (*Q. crecca*), widgeon (*Mareca penelope*), and pintail (*Dafila acuta*), a number of which were new to the collection.

7. Two fine specimens of the western variety of the red-

tailed buzzard (*Buteo borealis calurus*) were received from the Quijotoa mountains, in southern Arizona.

8. Four pairs of the beautiful crested pigeon (*Ocyphaps lophotes*), from Australia.

9. A snake was received in July, by exchange, much resembling some of our common water snakes, and was subsequently identified as the tigrine snake (*Tropidonotus tigrina*) of Japan.

10. Another of the hawks from the western United States, Swainson's buzzard (*Buteo swainsoni*), was captured in Santa Clara county, California, and presented to the Society.

11. A large variety of squirrels are found throughout Central and South America. One of the most attractive of these is the red-bellied squirrel (*Sciurus aureogaster*), a specimen of which was procured in August.

12. From the same region came a cactus conure (*Conurus cactorum*).

13. Among the most welcome addition to the collection of parrots, was a specimen from the Moluccas, the blue-streaked lory (*Eos reticulata*).

14. A pair of green-winged doves (*Chalcophaps indica*), received by purchase, were also new to the collection.

15. The series of toucans was enriched by one of the most beautiful of the group, the green-billed toucan (*Ramphastos dicolorus*).

16. The rose-colored pastor (*Pastor roseus*), a bird from Southern Asia, having close affinities to the starling, was procured at the same time.

17. Two yellow-headed conures (*Conurus jendaya*) from South America.

18. The sun bittern (*Eurypyga helias*), a strange bird which seems intermediate in structure between the cranes and the herons, was also for the first time exhibited.

19. The Viscacha (*Lagostomus trichodactylus*), a burrowing rodent which abounds in the plains of Buenos Ayres, and which has the strange habit of collecting about the mouth of its burrow, any articles, particularly those of a shining appearance, which may be found in the vicinity, was a welcome addition to the collection of small mammals.

20. A brush-tailed porcupine (*Atherura africana*) from West Africa.

21. A splendid pair of Carolina parakeets (*Conurus carolinensis*) were presented by their owner. These are the first of the species which have been in the collection for some years, and it is much to be regretted that this beautiful parrot, the only one indigenous to the United States, has become so rare and in all probability will soon be extinct.

22. A white-throated monkey (*Cercopithecus albogularis*) was received among a collection of other African species.

23. In November, was received by presentation, a yellow boa (*Chilobothrus inornatus*), from Jamaica, a species which is rapidly decreasing in numbers.

24. A hairy armadillo (*Dasypus villosus*), which arrived in December, has remained in better condition than any of the group which have been exhibited in the Garden. Being placed in a large case, with a sufficiency of loose earth, it has afforded to visitors an excellent opportunity for observing the habits of these curious animals.

25. A young loon, received in January, was identified as the red-throated diver (*Colymbus septentrionalis*), a species by no means as common in the Middle States as its near relation, the great northern diver.

26. A specimen of the least tinamou (*Crypturus pileatus*) from South America, was received in the same month.

27. A very good specimen of that *rara avis*, a white crow of the common species (*Corvus americanus*) was presented.

28. One of the most interesting specimens ever procured by the Society, is a brush-turkey (*Tallegalla lathamii*) of New South Wales, which was purchased in January. In the whole home-history of birds there is nothing more remarkable than the habit displayed by the members of the *Megapodidæ*, or mound-builders, at the season of incubation. A mound of earth and rubbish is scraped together by the parent birds, and reaches sometimes a diameter of twenty-five feet and a height of four or five. The eggs are deposited in layers in a large pit at the centre, packed in a mass of decomposing vegetable matter, the heat generated by

fermentation being sufficient to hatch the eggs. After which the young bird scratches its own way to the surface. The specimen procured is a female, but it is hoped that a male may also be obtained, and that this extraordinary habit may be shown in the garden.

29. At the same time several rare parrots from Australia were purchased: Barraband's parrakeet (*Polytelis barra-bandî*), and the scaly-breasted lorikeet (*Trichoglossus chlorolepidotus*).

30. The female jaguar which had been in the Garden since 1874, began some time ago to show signs of decay from old age, and at the first opportunity a new one was procured to replace her. The newcomer is about half grown, and was captured on the banks of the Madeira river, a tributary of the upper Amazon. The purchase was most timely, as a few days after its arrival the old one died.

Following is a full list of the species which were exhibited for the first time in the Garden.

MAMMALIA.

White-throated Monkey (*Cercopithecus albogularis*). East Africa.

Serval (*Felis serval*). Africa.

Brown Bear (*Ursus arctos*). Europe.

Red-bellied Squirrel (*Sciurus aureogaster*). Central America.

Brush-tailed Porcupine (*Atherura africana*). West Africa.

Viscacha (*Lagostomus trichodactylus*). Buenos Ayres.

Deer (*Cariacus* ———). Mexico.

Indian Buffalo (*Bubalus buffelus*). India.

Ibex (*Capra ibex*). Switzerland.

Common Zebra (*Equus zebra*). South Africa.

Hippopotamus (*Hippopotamus amphibius*). Egypt.

Hairy Armadillo (*Dasypus villosus*). South America.

AVES.

Black and White Creeper (*Mniotilta varia*). North America.

Hawfinch (*Coccothraustes vulgaris*). Europe.

- Rose-colored Pastor (*Pastor roseus*). Asia.
 Green-billed Toucan (*Ramphastos dicolorus*). Guiana.
 Blue-streaked Lory (*Eos reticulata*). Moluccas.
 Scaly-breasted Lorikeet (*Trichoglossus chlorolepidotus*). Australia.
 Barraband's Parrakeet (*Polytelis barrabandi*). Australia.
 Cactus Conure (*Conurus cactorum*). Brazil.
 Yellow-headed Conure (*Conurus jendaya*). Brazil.
 Petz's Conure (*Conurus petzi*). Mexico.
 Western Red-tailed Buzzard (*B. borealis calurus*). North America.
 Crested Pigeon (*Ocyphaps lophotes*). Australia.
 Green-winged Dove (*Chalcophaps indica*). India.
 Brush Turkey (*Tallegalla lathamii*). Australia.
 Sun Bittern (*Eurypyga helias*). North America.
 Tufted Duck (*Fuligula cristata*). Europe.
 Pochard (*Fuligula ferina*). Europe.
 Common Teal (*Querquedula crecca*). Europe.
 Garganey Teal (*Q. circia*). Europe.
 Red-throated Diver (*Colymbus septentrionalis*). Northern Hemisphere.
 Great Tinamou (*Tinamus major*). Brazil.
 Least Tinamou (*Crypturus pileatus*). South America.

REPTILIA.

- Yellow Boa (*Chilobothrus inornatus*). Jamaica.
 Tigrine Snake (*Tropidonotus tigrinus*). Japan.

The animals bred during the year were as follows:—

- 1 Moor Macaque (*Macacus maurus*).
- 8 Dingos (*Canis dingo*).
- 2 Kit Foxes (*Vulpes velox*).
- 1 Zebu (*Bos indicus*).
- 1 Bison (*Bison americanus*).
- 1 Eland (*Oreos canna*).
- 3 Common Deer (*Cervus virginianus*).
- 1 Wapiti (*Cervus canadensis*).

- 1 Mazame Deer (*Cervus campestris*).
- 3 Fallow Deer (*Cervus dama*).
- 1 Bactrian Camel (*Camelus bactrianus*).
- 12 Prairie Dogs (*Cynomys ludovicianus*).
- 1 Great Kangaroo (*Macropus giganteus*).
- 1 Ground Parrakeet (*Calopsitta novæ-hollandiæ*).
- 4 Reeve's Pheasants (*Phasianus reevesi*).
- 1 Pea Fowl (*Pavo cristata*).
- 16 Diamond Rattlesnakes (*Crotalus adamanteus*).
- 4 Banded Rattlesnakes (*Crotalus horridus*).

The losses by death have been small, and for the most part have been confined to animals of minor importance.

A rigid economy has been observed in all departments of the management, and the cost of maintenance has been reduced even below the figures of previous years, without seriously impairing its efficiency. No work has been undertaken beyond such repairs as were necessary to the preservation of the property of the Society, and a small outlay will probably be sufficient to meet needs arising, to this end, during the coming year.

The expenditure for purchase of animals has been mainly devoted to filling gaps in the collection, which—it may be justly claimed—presents to-day a greater and more typical variety of animal forms, in furtherance of the educational facilities which have been one of the chief aims of the Society, than at any previous period of the history of the Garden.

Respectfully,

ARTHUR ERWIN BROWN.

ZOOLOGICAL GARDEN, March 1st, 1885.

